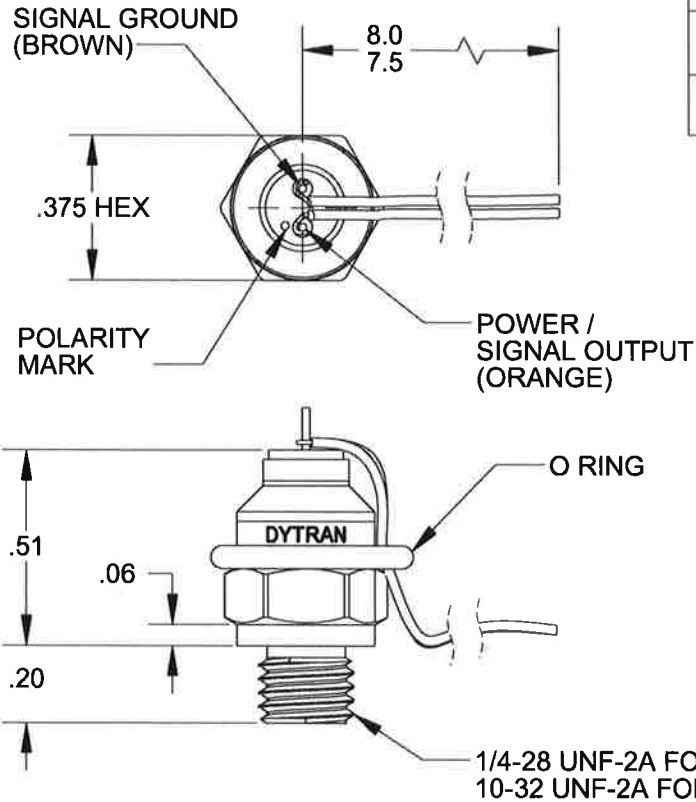


**PROPRIETARY AND CONFIDENTIAL**

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**REVISIONS**

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	5057	IS:1/4-28 UNF-2A FOR 3086A1 THRU A6 10-32 UNF-2A FOR 3086A1T THRU A6T WAS: 1/4-28 UNF-2A	RA, 2/13/08	JS	JS
D	5498	ADDED WIRES & O RING	JS 10/16/08	AS	DV
E	12854	ADDED WIRE LENGTH DIMENSION	NDC 07/28/16	<i>hw</i>	<i>pt</i>



2. HOUSING MATERIAL: TITANIUM ALLOY

1. RECOMMENDED MOUNTING TORQUE:  
30 LB-IN

DRILL HOLE SIZE	TOLERANCE
.0135 THRU .125	+0.04 / -.001
.1260 THRU .250	+0.05 / -.001
.2510 THRU .500	+0.06 / -.001
.5010 THRU .750	+0.08 / -.001
.7510 THRU 1.000	+0.10 / -.001
1.001 THRU 2.000	+0.12 / -.001

UNLESS OTHERWISE SPECIFIED:  
INTERPRET DIM & TOL PER  
ASME Y14.5M - 1994.  
REMOVE BURRS.  
COUNTERSINK INTERNAL THDS  
90° TO MAJOR DIA.  
CHAM EXT THDS 45° TO MINOR DIA.  
THD LENGTHS AND DEPTHS ARE FOR  
MIN FULL THDS.  
THDS PER MIL-S-7742.  
DIMENSIONS APPLY AFTER FINISHING.  
ALL MACHINED SURFACES.  
TOTAL RUNOUT WITHIN .005.  
BREAK SHARP EDGES .005 TO .010.  
MACHINED FILLET RADII .005 TO .015.  
WELDING SYMBOLS PER AWS A2.4.  
ABBREVIATIONS PER MIL-STD-12.

UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES.  
TOLERANCES ARE:

DECIMALS	ANGLES
.XX ± .010	± 1°
.XXX ± .005	

MATERIAL	APPROVALS	DATE
FINISH	ORIG	PML 3/28/07
	CHK	JS 2/15/08
	APP	DV 10/17/08
	APP	<i>hw</i> 8/16/16

CONTRACT NO.



TITLE: **OUTLINE DRAWING, 3086A**

SIZE	CAGE CODE	DWG. NO.	REV
<b>A</b>	<b>2W033</b>	<b>127-3086A</b>	<b>E</b>

SCALE: 4:1      SOLIDWORKS      SHEET 1 OF 1



- **MINIATURE SIZE**
- **EXCELLENT LINEARITY**
- **HERMETICALLY SEALED**

**PHYSICAL**

Weight  
 Connector Top Mounted  
 Mounting Provision Integral Stud  
 Material Accelerometer and Connector  
 Element Style

ENGLISH		SI	
0.12	oz	3.5	grams
Solder Pins		Solder Pins	
10-32 UNF-2A		10-32 UNF-2A	
Titanium Alloy		Titanium Alloy	
Quartz Compression		Quartz Compression	

**PERFORMANCE**

Sensitivity, Nom. [1]  
 Range Full Scale  
 Low Frequency -3dB Point, Nom  
 Low Frequency -5% Point  
 Frequency Response, ±10%  
 Resonant Frequency  
 Isolation Cup Resonance  
 Electrical Noise  
 Linearity [2]  
 Maximum Transverse Sensitivity

2.00	mV/g	0.20	mV/m/s <sup>2</sup>
±2500	g	±24500	m/s <sup>2</sup>
0.16	Hz	0.16	Hz
0.5	Hz	0.5	Hz
0.35 to 10000	Hz	0.35 to 10000	Hz
>100	kHz	>100	kHz
>45	kHz	>45	kHz
0.035	Grms	0.34	m/s <sup>2</sup> rms
±1	% F.S.	±1	% F.S.
3	%	3	%

**ENVIRONMENTAL**

Maximum Shock  
 Temperature Range  
 Environmental Seal

±50000	Gpeak	±490000	m/s <sup>2</sup> peak
-60 to +250	°F	-51 to 121	°C
Hermetic		Hermetic	

**ELECTRICAL**

Supply Current Range [3]  
 Compliance Voltage Range [3]  
 Output Impedance, Nom  
 Bias Voltage  
 Discharge Time Constant  
 Ground Isolation, Case to Mounting Surface, Min

2 to 20	mA	2 to 20	mA
+18 to +20	Volts	+18 to +20	Volts
100	Ω	100	Ω
+7.5 to +9.5	VDC	+7.5 to +9.5	VDC
0.8 to 2.0	Sec	0.8 to 2.0	Sec
10	MΩ	10	MΩ

**This family also includes:**

Model	Sensitivity (mV/g)	Range F.S. (g)	Maximum Shock (g)	Operating Temp (°F)
3086A1T	0.05	70,000	100,000	-60 to +250
3086A2T	0.1	50,000	100,000	-60 to +250
3086A3T	0.25	20,000	100,000	-60 to +250
3086A4T	0.5	10,000	50,000	-60 to +250
3086A5T	1.0	5,000	50,000	-60 to +250

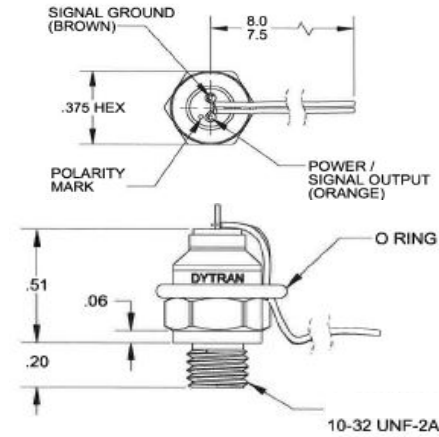
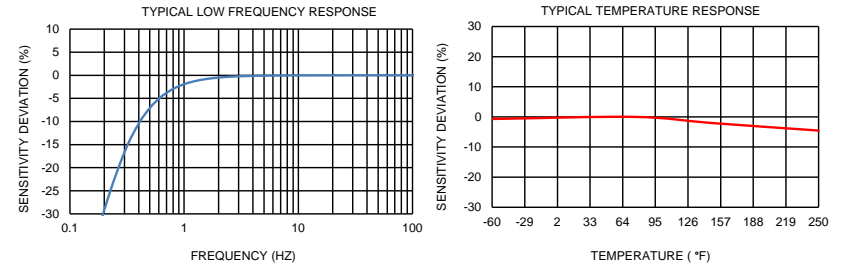
Please refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)

**Notes:**

- [1] Measured by impacting against calibrated force sensor. NIST traceable.
- [2] Percent of full scale or any lesser full scale range, zero-based best fit straight line method.
- [3] Power only with Dytran or Dytran approved current source type power unit. Do not supply power without current limiting. You will destroy the integral electronics. This will void the warranty.
- [4] Recommended Cable: Dytran Part No. 128-6869AXX (XX denotes length in feet)



Units on the line drawing are in inches. Refer to 127-3086A for more information.

